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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/871,507	05/31/2001	Landon B. Vines	US018074/ID780243	3093

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09/11/2002

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EXAMINER

BERRY, WILLIE WENDELL JR

ART UNIT

PAPER NUMBER

3723

DATE MAILED: 09/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

S.M.

Office Action Summary

Application No.

09/871,507

Applicant(s)

VINES ET AL.

Examiner

Willie Berry, Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 18 June 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osterheld et al.

Osterheld discloses a method for clearing slurry from a polishing pad comprising: placing a wafer substrate (column 7, lines 42-45), rotating a polishing pad (column 7, lines 45-47), dispensing slurry from the dispense bar (column 7, lines 49-52), spraying a high pressure fluid to remove slurry from between the wafer substrate and the pad with high pressure dispense bar (column 7, lines 57-66), a pressure spray range (column 10, lines 5-7), a rotating pad speed range (column 8, lines 55-59) a splash guard (column 2, lines 43-47), a second slurry dispense portion (column 2, lines 37-40), a second wafer carrier (column 8, lines 22-25), and locating the dispense bar between wafer carriers (column 3, lines 55-64).

Osterheld does not disclose the steps of terminating the slurry dispense and rotating the pad at a second speed during spraying.

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The steps of terminating the slurry dispense and rotating the pad at a second speed during spraying, would have been obvious to one having ordinary skill in the art at the time the invention was made, since a computer could be programmed to perform this steps on the basis of the user's preference as a matter of obvious design choice. The specific ranges of pressure and speed would have been obvious to one having ordinary skill in the art at the time the invention was made, since it is within the general skill of a worker in the art to discover the optimum or workable ranges on the basis of their suitability for the user's preference as a matter of obvious design choice.

Response to Arguments

3. Applicant's arguments filed 6/18/02 have been fully considered but they are not persuasive. Applicant argues that the office action does not establish a prima facie case of obviousness. The examiner disagrees because Osterheld states in column 8, lines 28-30; a substrate is polished by a selected recipe to achieve the polishing results. In this recipe, a substrate could be polished by rotating a pad at first and second rotating speeds. Also in this recipe, slurry dispensing could stop and start again. Osterheld also states in column 9, lines 9-11; a rinse is performed while the substrate is in contact with the pad. It is the examiner's belief that it would have been obvious to make the modifications to Osterheld to arrive at applicant's claimed invention.

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Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication from the examiner should be directed to Willie Berry whose telephone number is (703) 308-7467.

WP
Willie Berry, Jr. :wbj
September 5, 2002


Joseph J. Hail, III
Supervisory Patent Examiner
Technology Center 3700